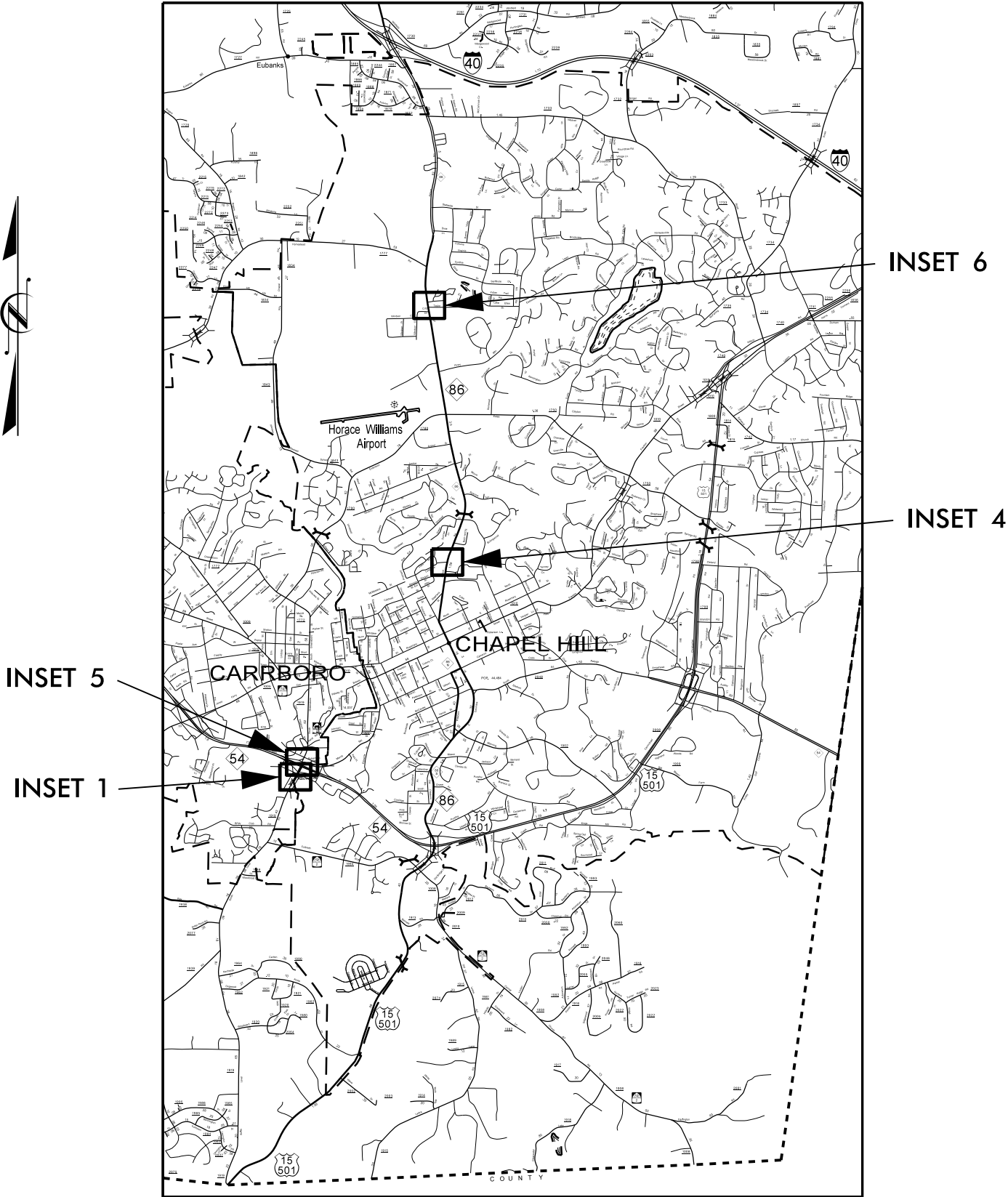


# 2017 MUNICIPAL CURB RAMP CONTRACT – ORANGE COUNTY R-5787B (INSETS 1, 4 – 6)



2012 ROADWAY ENGLISH STANDARD DRAWINGS: EFF. 01-17-12

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch – N. C. Department of Transportation – Raleigh, N. C., Dated January 2012, are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 8 – INCIDENTALS	
848.05	Curb Ramp – Proposed Curb and Gutter
848.06	Curb Ramp – Existing Curb and Gutter
DIVISION 11 – WORK ZONE TRAFFIC CONTROL	
1101.01	Work Zone Advance Warning Signs
1101.02	Temporary Lane Closures
1101.04	Temporary Shoulder Closure
1101.11	Traffic Control Design Tables
1110.01	Stationary Work Zone Signs
1110.02	Portable Work Zone Signs
1115.01	Flashing Arrow Panels
1130.01	Drum
1135.01	Cones
1150.01	Flagging Devices
1165.01	Work Vehicle Lighting Systems and TMA Delineation
1180.01	Skinny Drum

# 2017 MUNICIPAL CURB RAMP CONTRACT – ORANGE COUNTY R-5787B

INSET 1

SR 1919 (Smith Level Rd)  
@ Public Works Dr  
(Intersection ID# )

UPGRADE CR IN  
QUADRANTS 1, 2, 3, 4

QUAD 2,3 GUARDRAIL

INSET 4

NC 86 (Martin Luther  
King Jr Dr) @  
Longview St  
(Intersection ID#C106)

UPGRADE CR IN  
QUADRANTS 3, 4

INSET 5

SR 1919 (Smith Level Rd)  
@ SR 1927 (S Merritt  
Mill Rd)  
(Intersection ID# )

UPGRADE CR IN  
QUADRANTS 1, 2

INSET 6

NC 86 (Martin Luther  
King Jr Dr) @ Speedway  
(Intersection ID#C084)

UPGRADE CR IN  
LOCATIONS 1, 2, 3, 4



# 2017 MUNICIPAL CURB RAMP CONTRACT – ALAMANCE COUNTY

## R-5787B

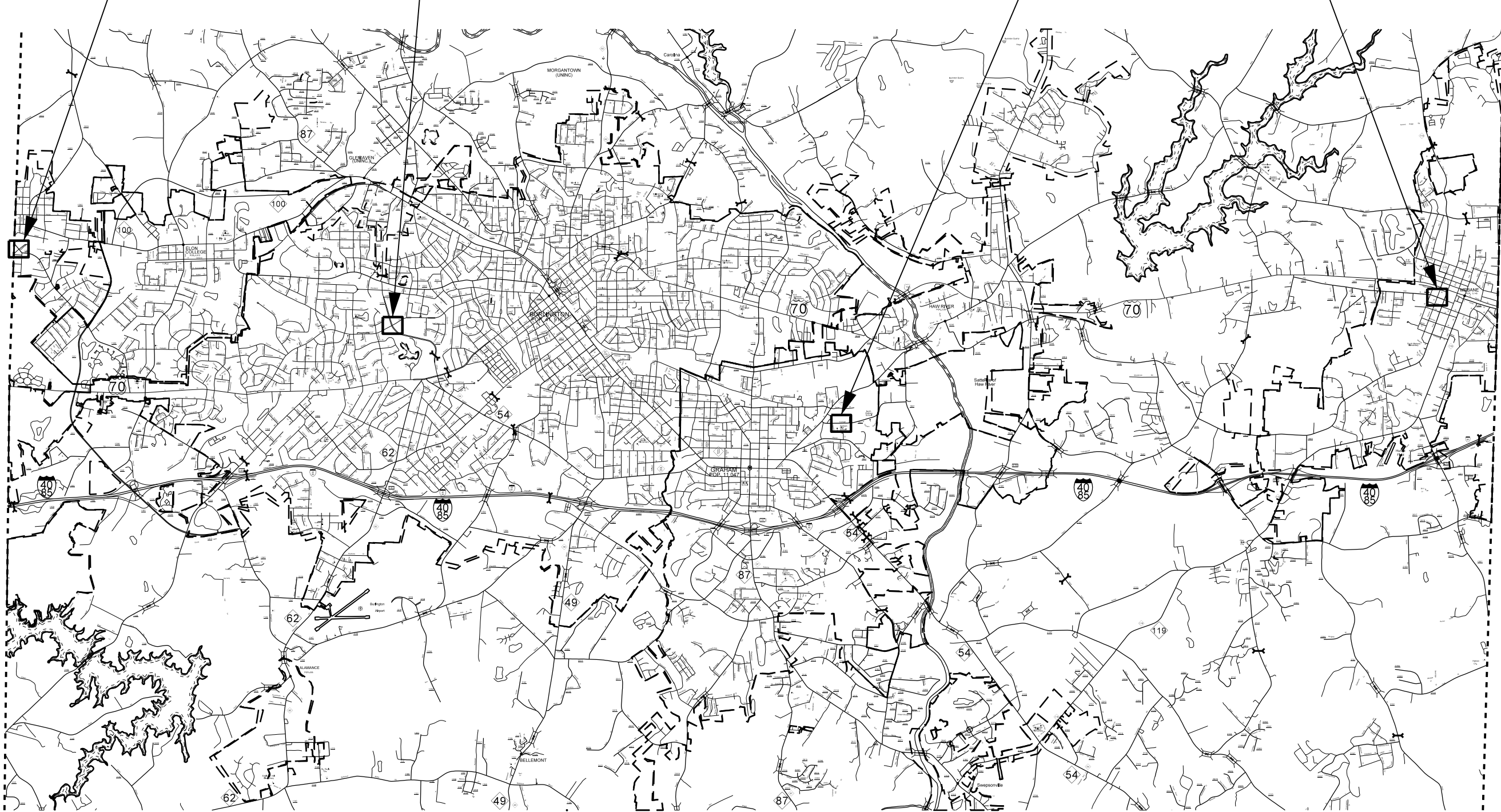
### (INSETS 2, 3, 7 & 8)

INSET 7

INSET 2

INSET 3

INSET 8





# 2017 MUNICIPAL CURB RAMP CONTRACT – ALAMANCE COUNTY

## R-5787B



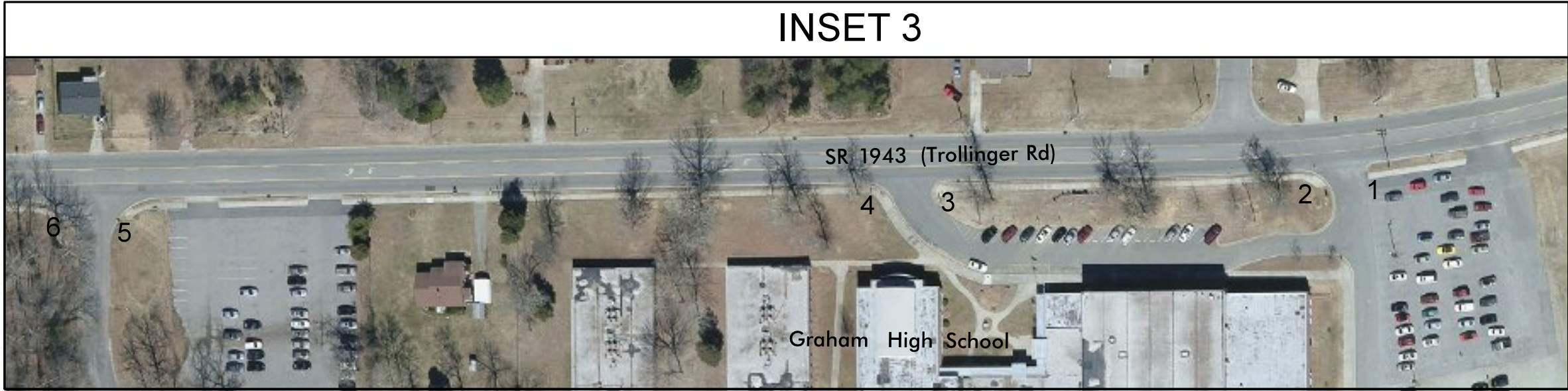
SR 1452 (O'Neal/  
Rockwood Ave)  
@ Edgewood Ave  
(Intersection ID#B022)

UPGRADE CR IN  
QUADRANTS 1, 2, 3



SR 1309 Alamance St  
@ Cummings St  
(Intersection ID#A089)

UPGRADE CR IN  
QUADRANTS 1, 2, 3, 4



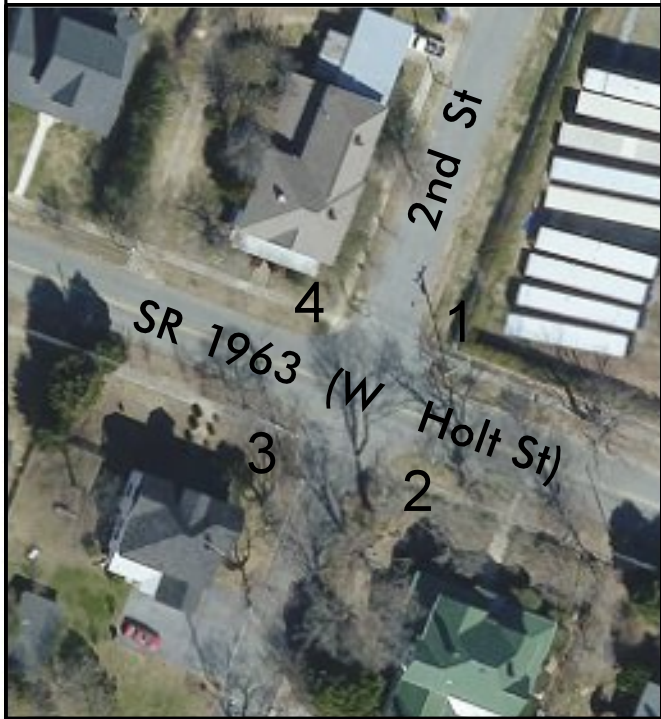
SR 1943  
(Trollinger Rd)  
@ Graham High  
School  
(Intersection  
ID#B006)

UPGRADE CR AT  
LOCATIONS 2-6

# 2017 MUNICIPAL CURB RAMP CONTRACT – ALAMANCE COUNTY

## R-5787B

INSET 8



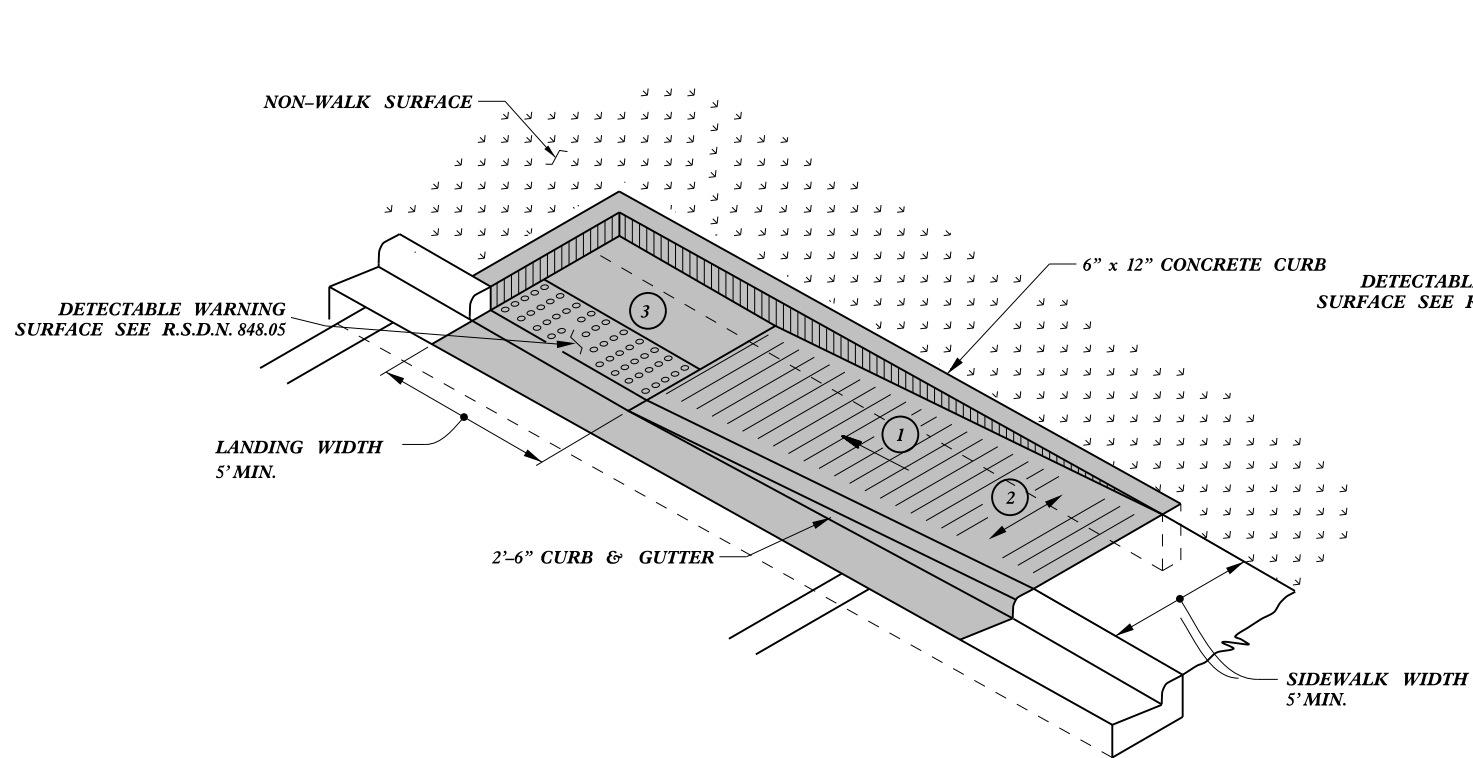
SR 1963 (W Holt St)  
@ 2nd St  
(Intersection ID#A029)

UPGRADE CR IN  
QUADRANTS 1, 2, 3, 4  
NO C&G IN QUAD 2

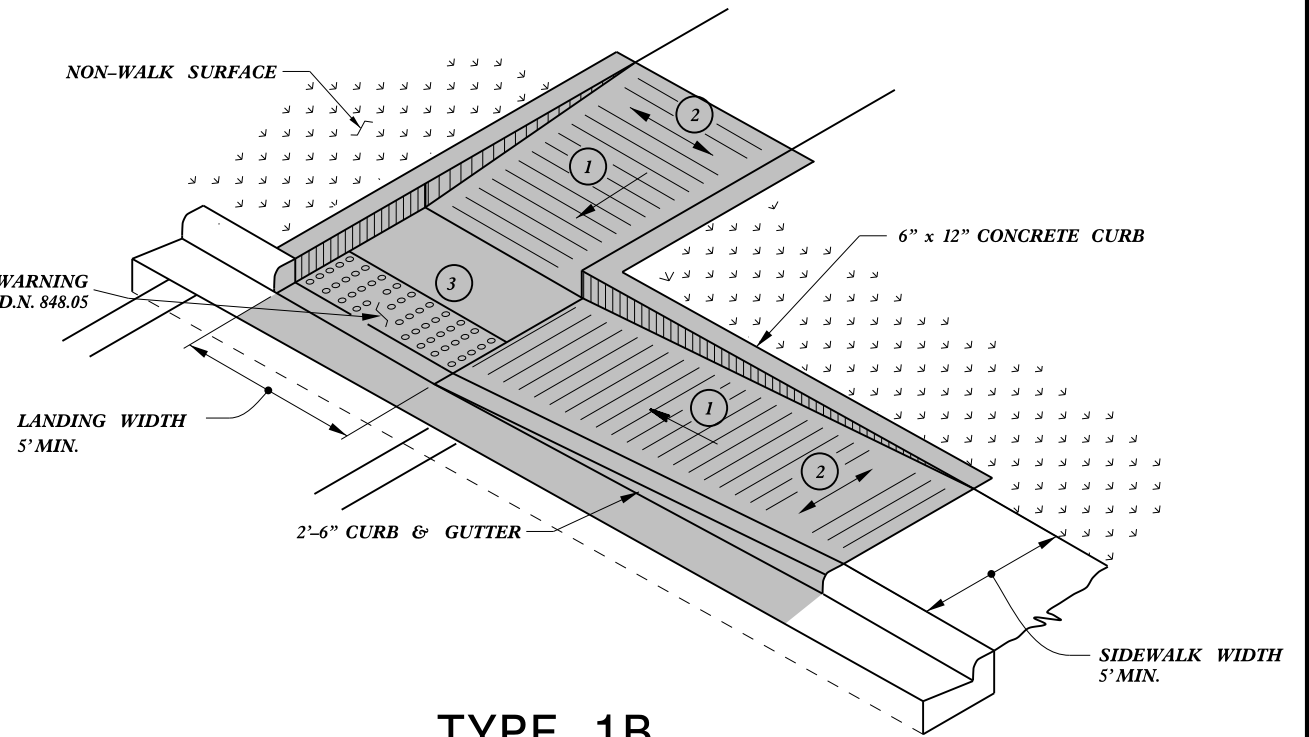




5/14/99



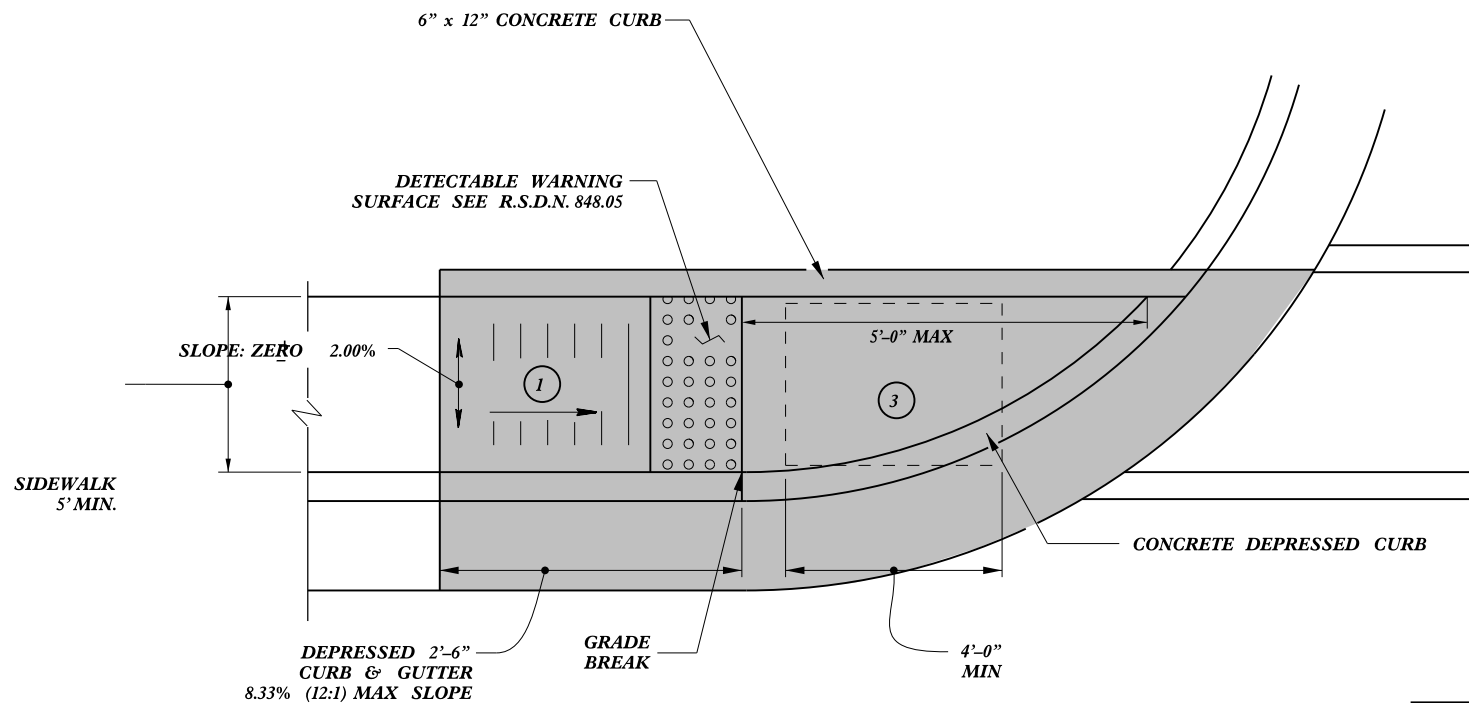
TYPE 1A



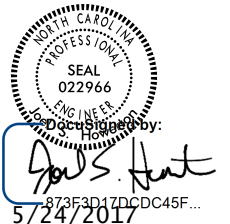
TYPE 1B

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

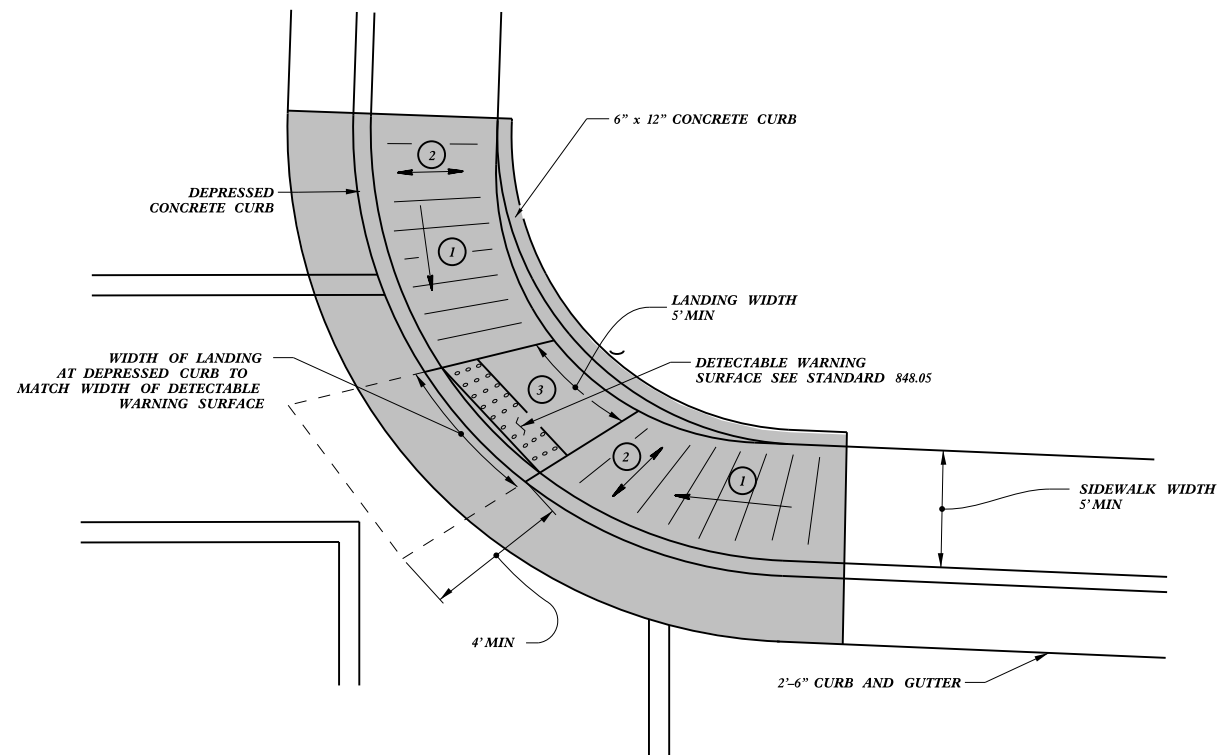


TYPE 1

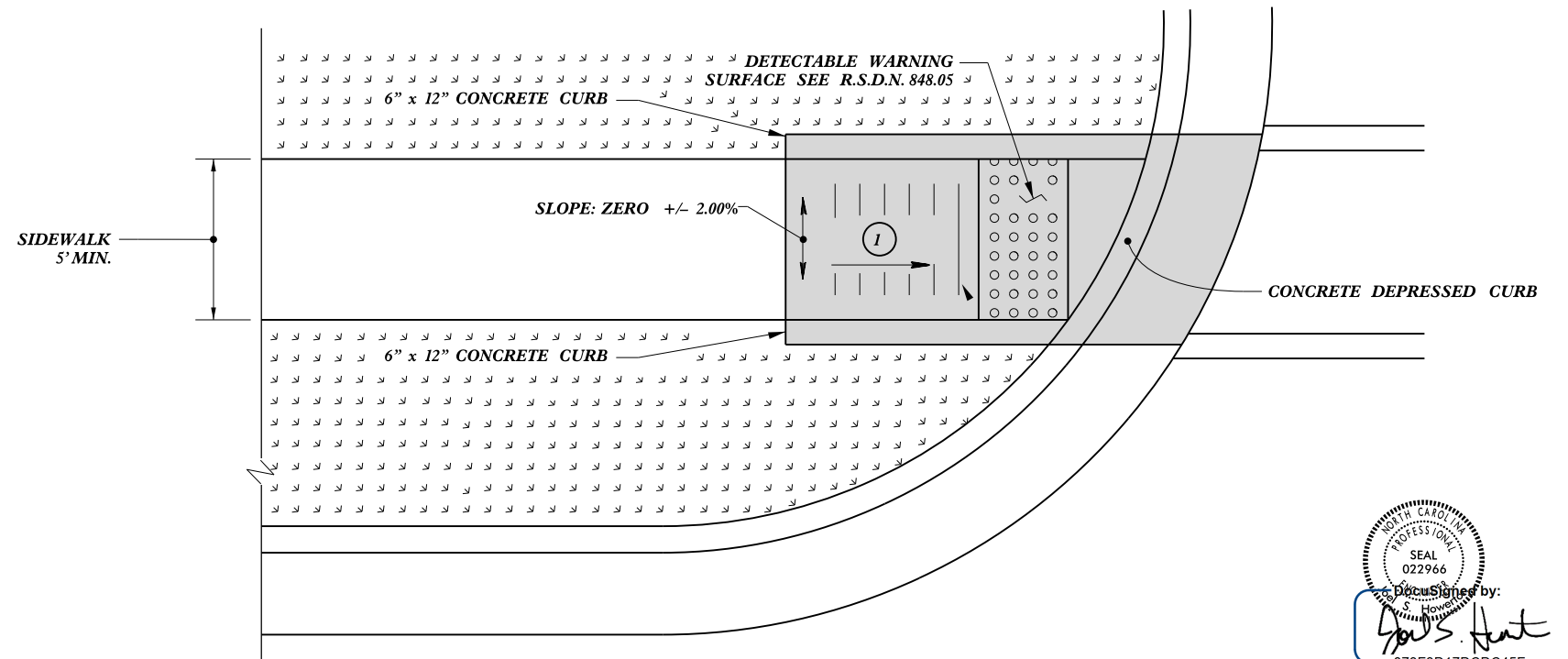


CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: sds/2012CurbRamp/CurbRampDetails.dwg	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES



TYPE 2B



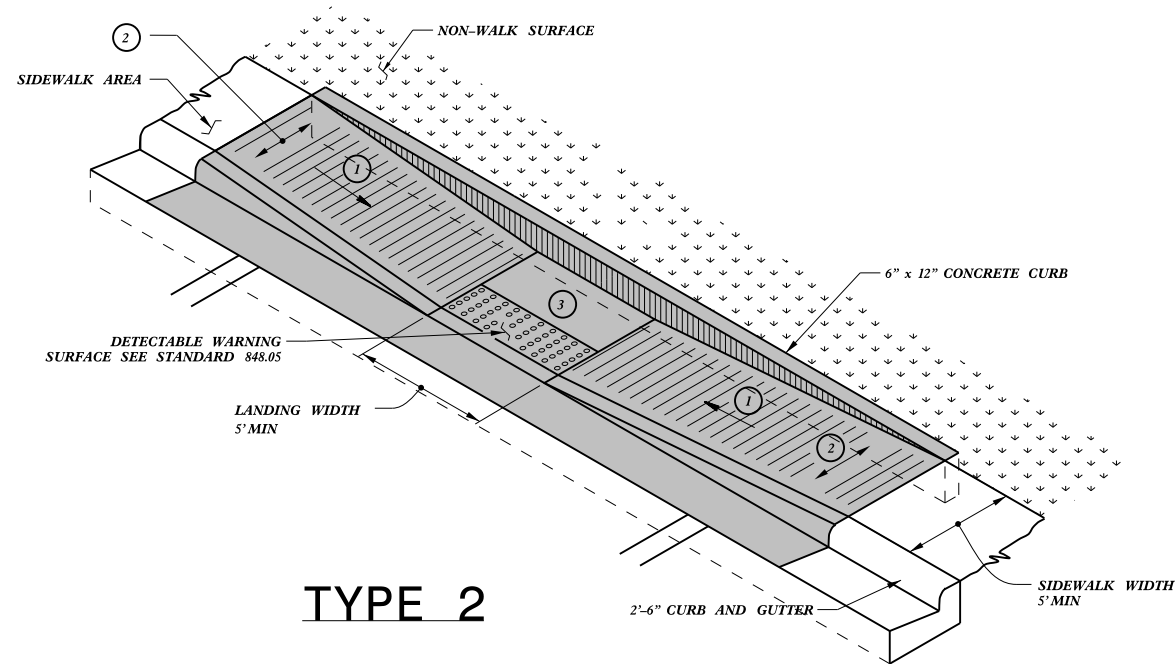
TYPE 1 Modified

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

Professional Engineer  
Seal 022966  
Discussed by:  
J.S. Howerton  
5/24/2017

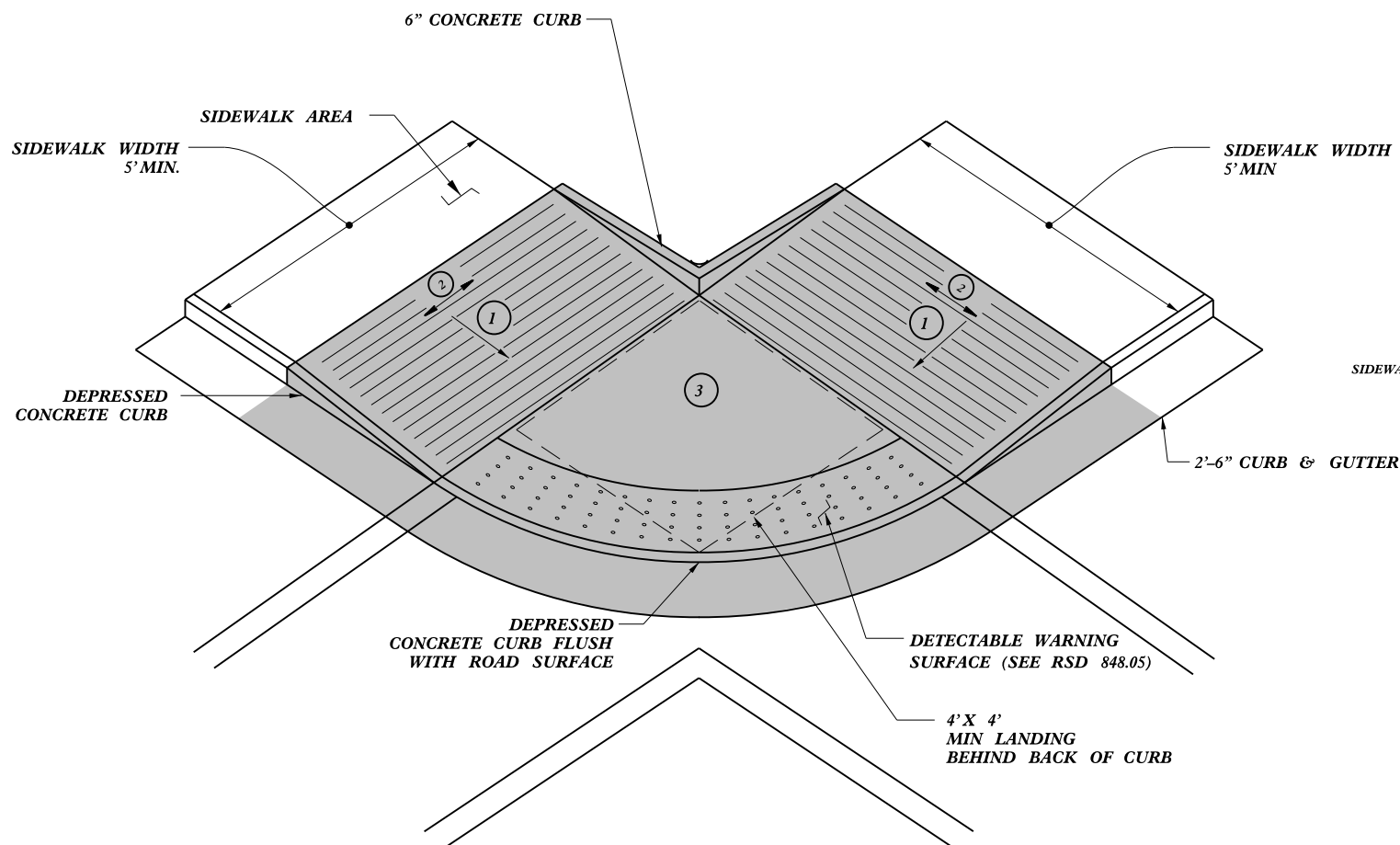
CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119	
CURB RAMPS Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg	



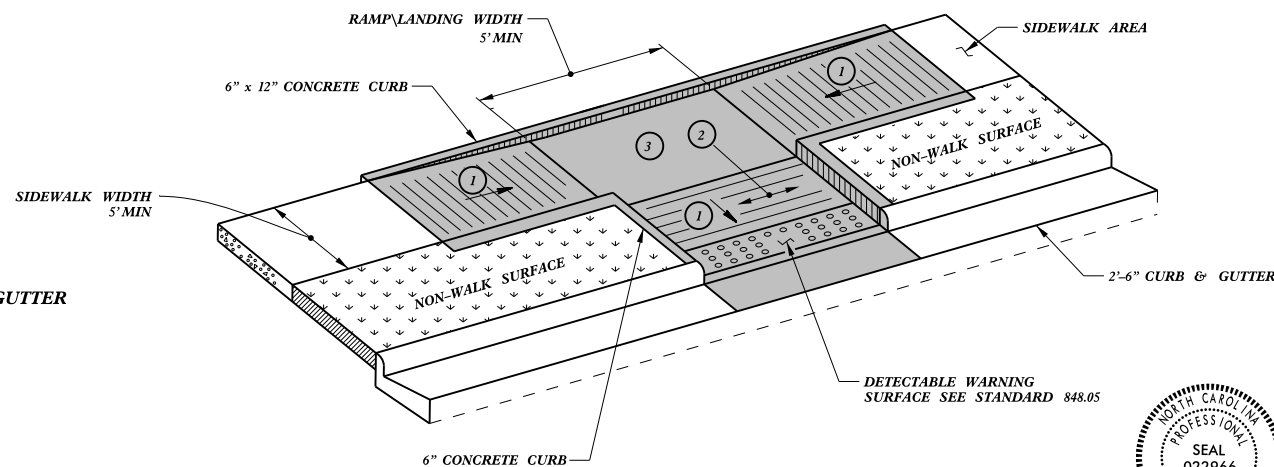
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3



Designed by:  
J.S. Howerton  
5/24/2017

CONTRACT STANDARDS  
AND DEVELOPMENT UNIT  
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS  
Parallel Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11  
MODIFIED BY: DATE:   
CHECKED BY: DATE:   
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES



ORANGE/ALAMANCE COUNTY MUNICIPAL CURB RAMP LOCATIONS - R-5787B

Inset #	County	Municipality	Major Route	Minor Route	Int. ID #	CONCRETE CURB RAMP (TYPE 848.06)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1A)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1 MOD.)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 2A)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 2B)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 3)	TEMPORARY TRAFFIC CONTROL	TEMPORARY SILT FENCE	WATTLE	SEEDING AND MULCHING
						EA	EA	EA	EA	EA	EA	EA	LS	LF	LF	AC
1	ORANGE	Carrboro	SR 1919 (Smith Level Road )	Public Works Dr.									1	75	50	0.02
			Quadrant 1					1								
			Quadrant 2					1			1					
			Quadrant 3								1					
			Quadrant 4					1								
						0	0	3	0	0	2	0	1	75	50	0.02
2	ALAMANCE	Burlington	SR 1452 (O'neal / Rockwood Connector)	Edgewood Ave	B022								1	50	25	0.02
			Quadrant 1					1				1				
			Quadrant 2			2										
			Quadrant 3					1				1				
			Quadrant 4													
						2	0	2	0	0	0	2	1	50	25	0.02
3	ALAMANCE	Graham	SR 1943 (Trollinger Rd)	Graham HS Ent.	B006								1	75	50	0.02
			Quadrant 2						1							
			Quadrant 3						1							
			Quadrant 4						1							
			Quadrant 5						1							
			Quadrant 6						1							
						0	0	0	5	0	0	0	1	75	50	0.02
4	ORANGE	Chapel Hill	NC 86 (Martin Luther King Jr, Blvd)	Longview Drive	C106								1	50	25	0.02
			Quadrant 3						1							
			Quadrant 4								1					
						0	0	0	1	0	1	0	1	50	25	0.02

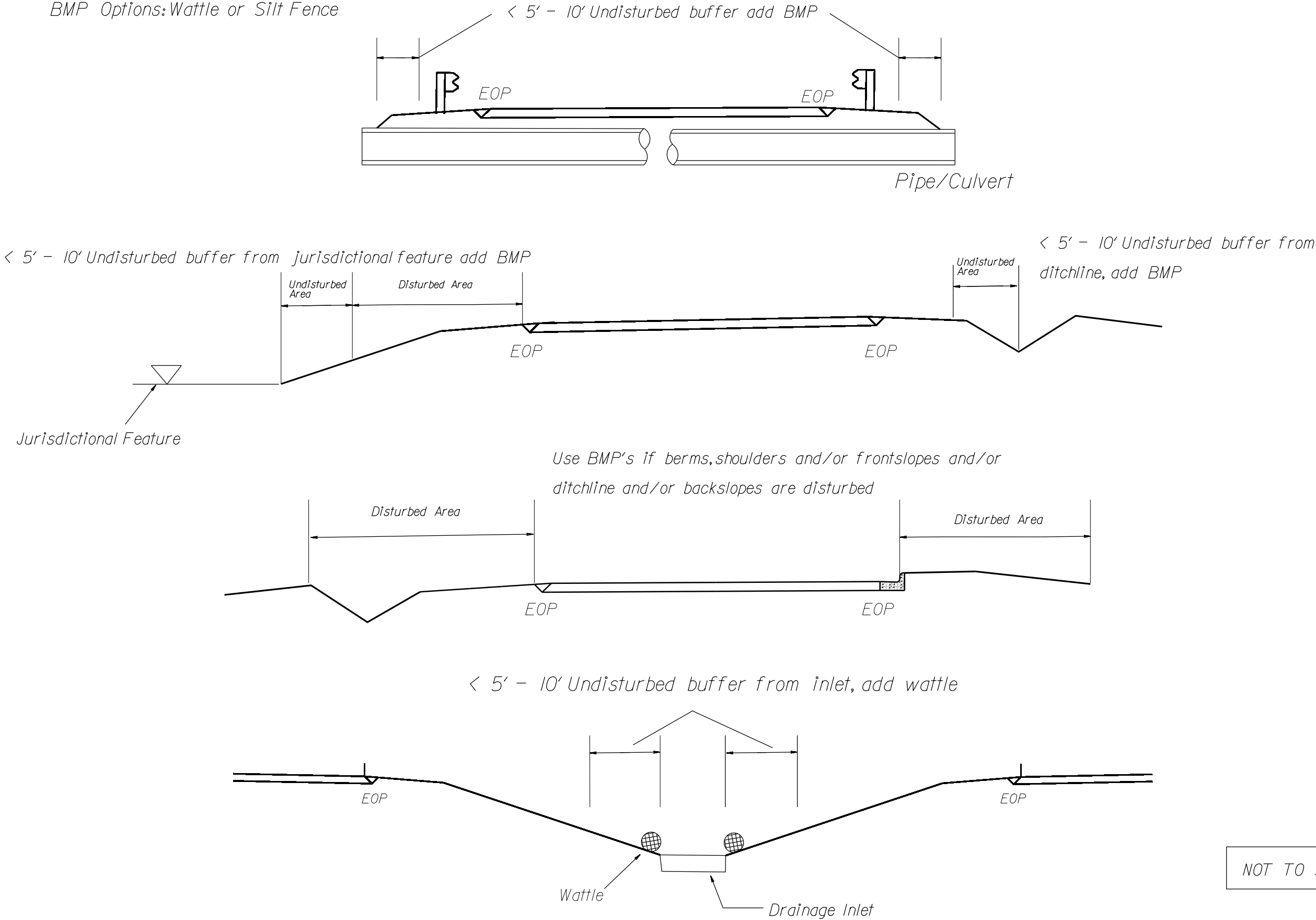
ORANGE/ALAMANCE COUNTY MUNICIPAL CURB RAMP LOCATIONS - R-5787B

Inset #	County	Municipality	Major Route	Minor Route	Int. ID #	CONCRETE CURB RAMP (TYPE 848.06)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1A)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 1 MOD.)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 2A)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 2B)	GENERIC PAVING ITEM (REMOVE AND REPLACE CONCRETE CURB RAMPS - TYPE 3)	TEMPORARY TRAFFIC CONTROL	TEMPORARY SILT FENCE	WATTLE	SEEDING AND MULCHING
5	ORANGE	Carrboro	SR 1919 (Smith Level Road )	SR 1927 (S Merritt Mill Rd)									1	50	25	0.02
			Quadrant 1									1				
			Quadrant 2					1								
						0	0	1	0	0	0	1	1	50	25	0.02
6	ORANGE	Chapel Hill	NC 86 (Martin Luther King Jr, Blvd)	Wilco Hess	C084								1	75	50	0.02
			Quadrant 1						1							
			Quadrant 2						1							
			Quadrant 3						1							
			Quadrant 4						1							
						0	0	0	4	0	0	0	1	75	50	0.02
7	ALAMANCE	Gibsonville	SR 1309 (Alamance St)	Cummings Street	A089								1	50	25	0.02
			Quadrant 1				1									
			Quadrant 2						1							
			Quadrant 3						1							
			Quadrant 4						1							
						0	1	0	3	0	0	0	1	50	25	0.02
8	ALAMANCE	Mebane	SR 1963 (W. Holt St)	2nd St	A029								1	50	25	0.02
			Quadrant 1							1						
			Quadrant 2						1							
			Quadrant 3						1							
			Quadrant 4						1							
						0	0	0	3	1	0	0	1	50	25	0.02
				GRAND TOTALS		2	1	6	16	1	3	3	8	475	275	0.16

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

# EROSION CONTROL DETAIL





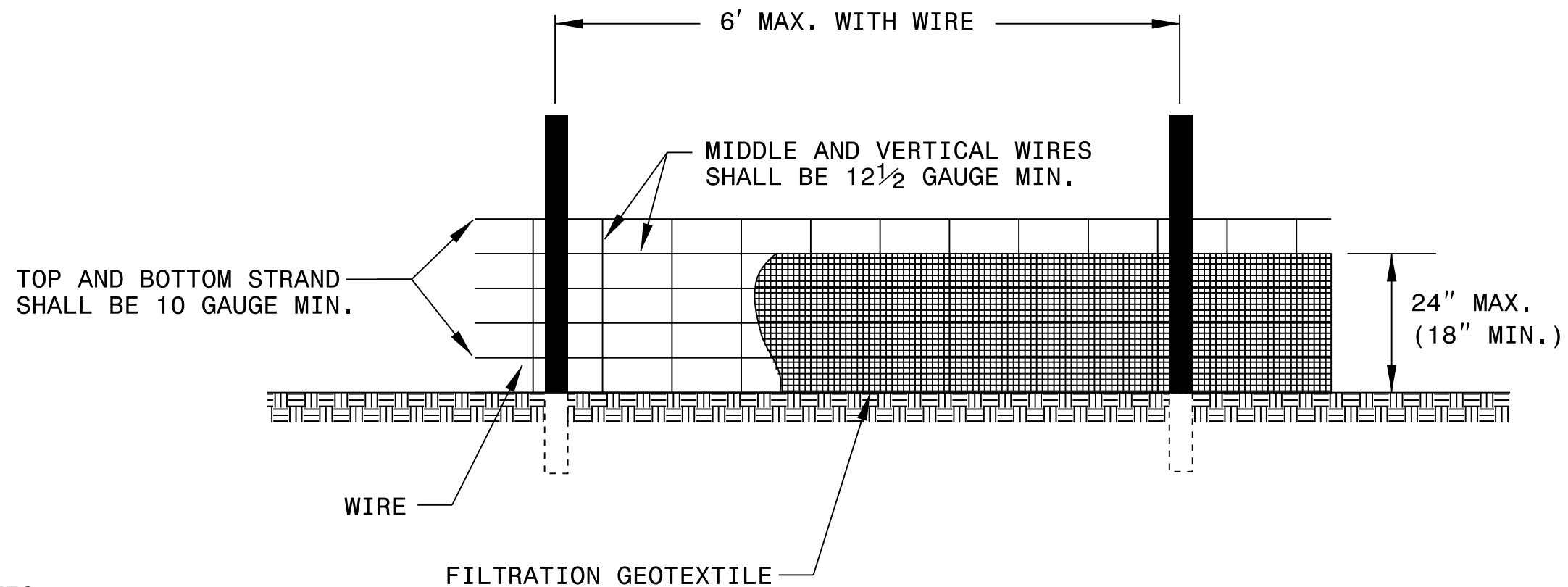
DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY  
WITH THE REGULATIONS SET FORTH BY THE  
NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011  
ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND  
NATURAL RESOURCES DIVISION OF WATER QUALITY.

# REINFORCED TEMPORARY SILT FENCE DETAIL



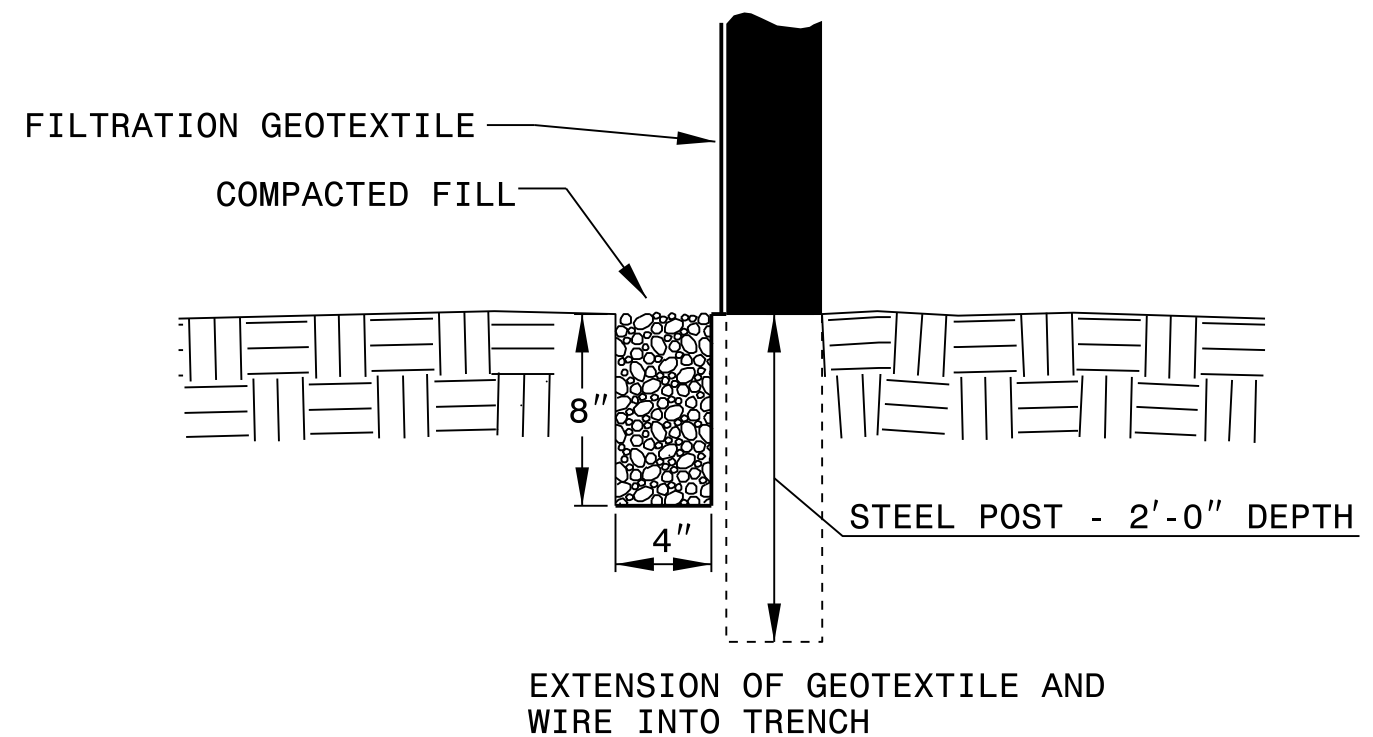
## NOTES

USE FILTRATION GEOTEXTILE A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE POSTS AND WIRE AS DIRECTED.

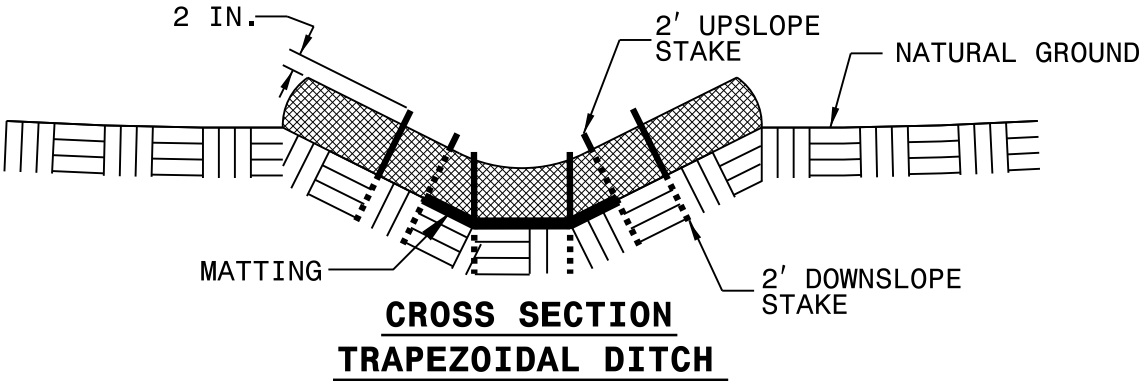
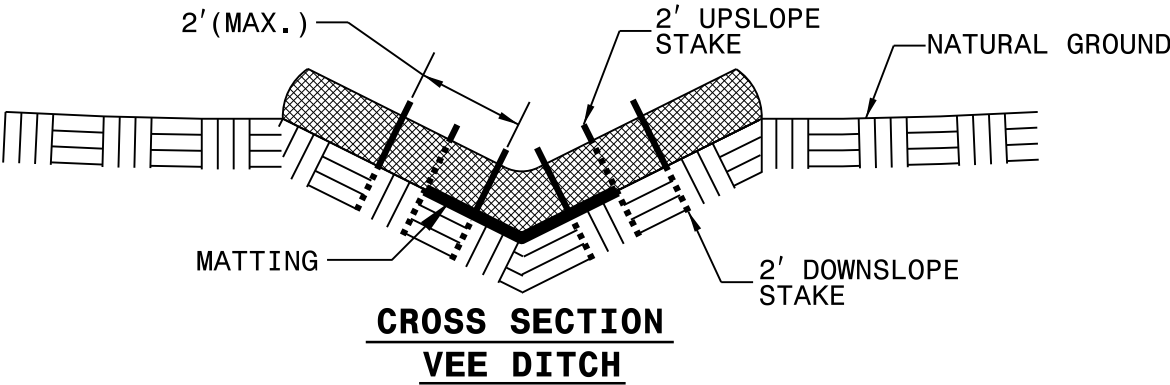
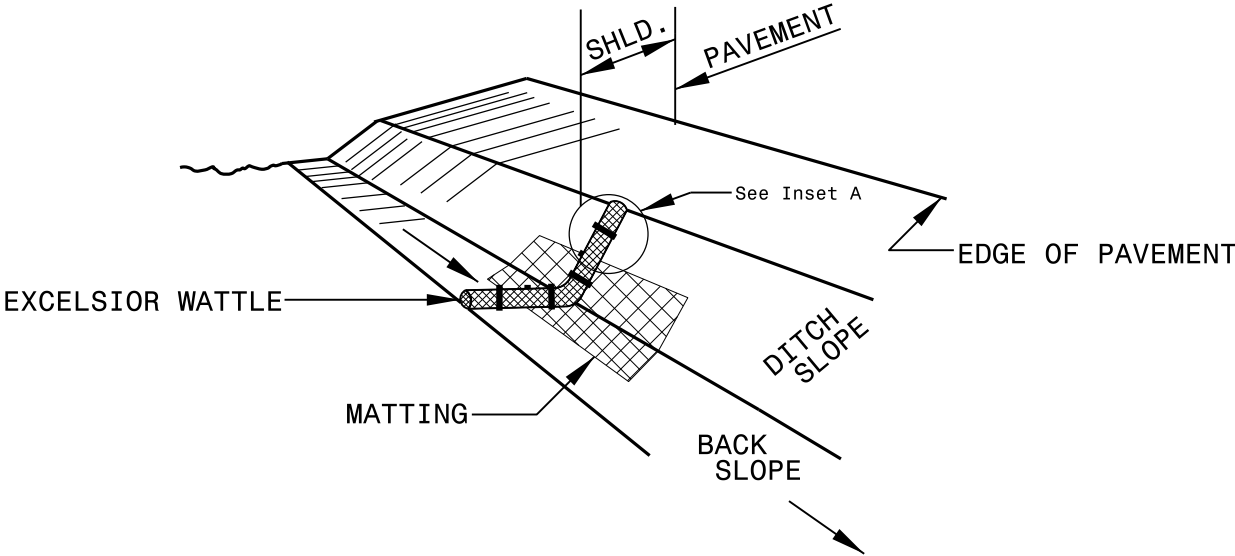
USE WIRE A MINIMUM OF 32" IN WIDTH AND WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.

PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE.

FOR MECHANICAL SLICING METHOD INSTALLATION, GEOTEXTILE SHALL BE A MAXIMUM OF 18" ABOVE GROUND SURFACE.



# WATTLE DETAIL



## NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

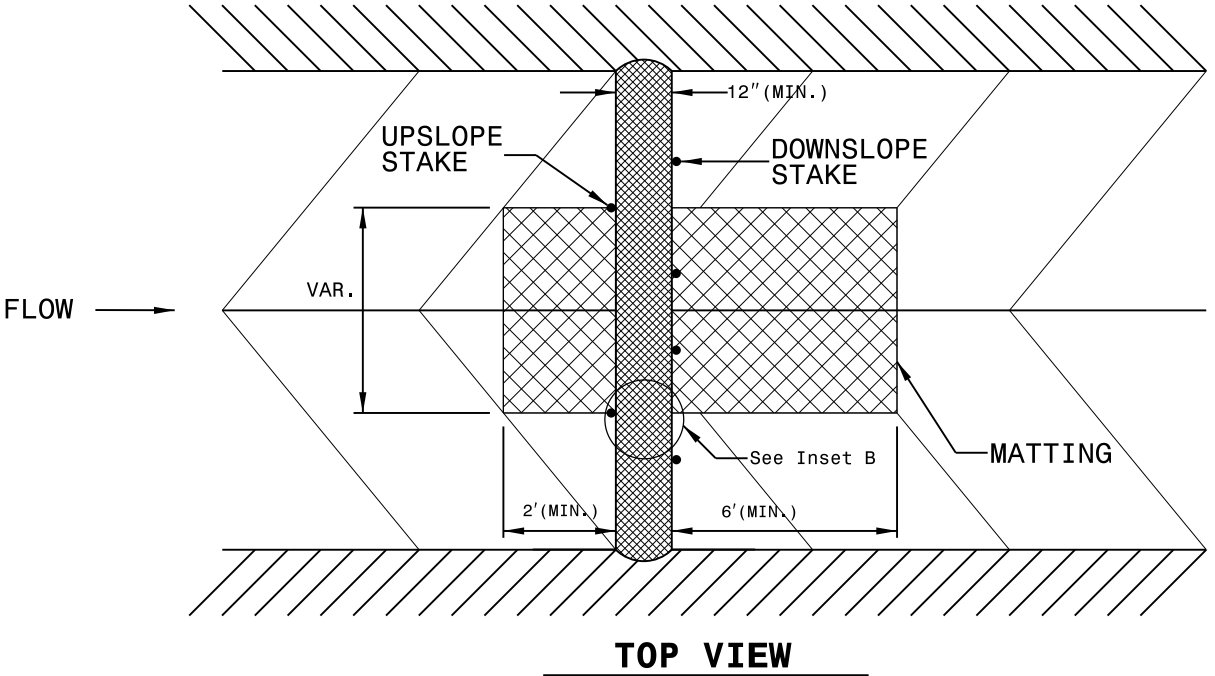
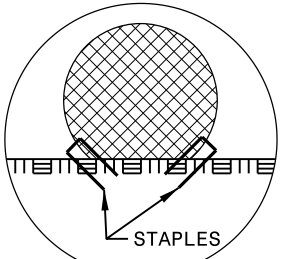
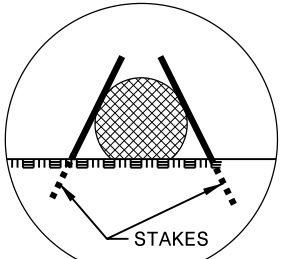
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

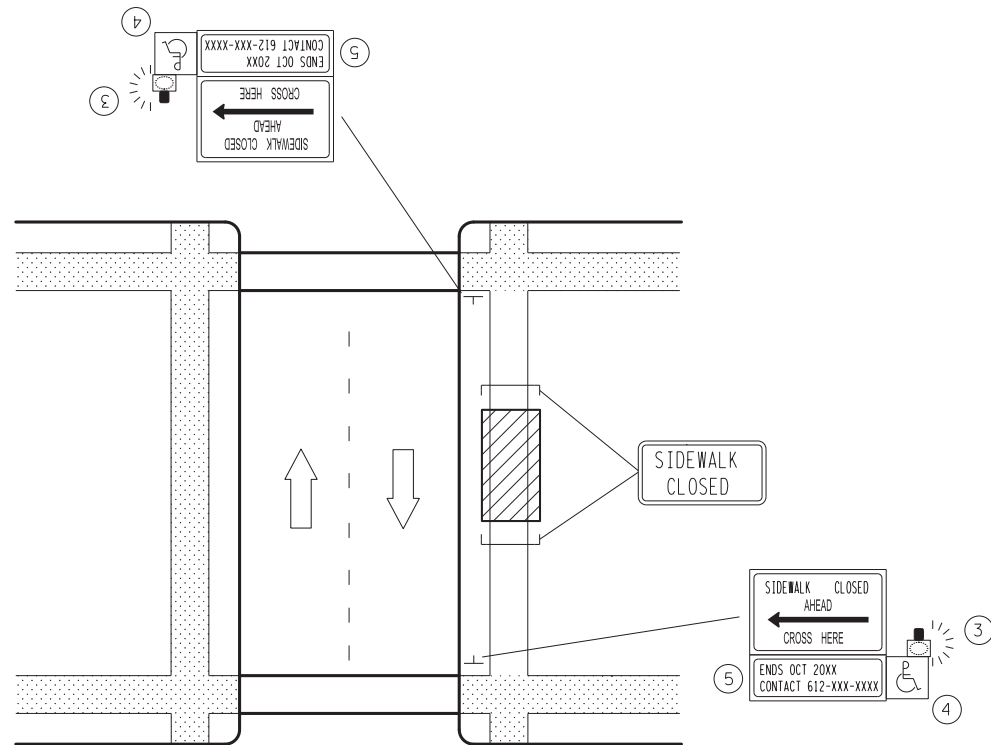
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

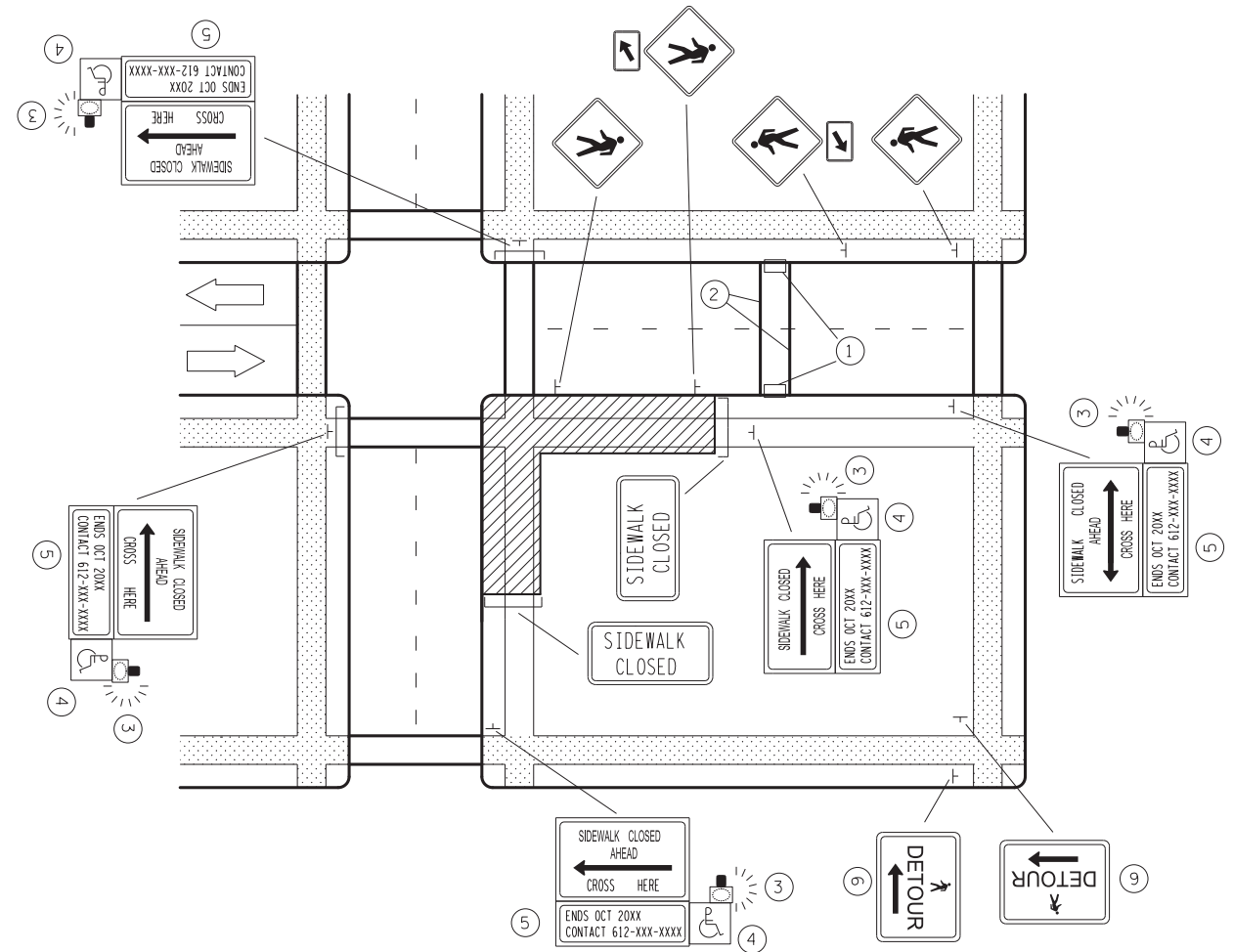
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.







OTHER SIDE OF STREET DETOUR  
(FOR MID-BLOCK CLOSURE)



OTHER SIDE OF STREET DETOUR OR DETOUR WITH TRAILBLAZING SIGNS  
(FOR CORNER SIDEWALK CLOSURE WITH OPTIONAL TEMPORARY CROSSWALK)

## GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO TRAFFIC (BIKES, PEDESTRIANS) IS REDUCED ENOUGH TO CAUSE HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS.

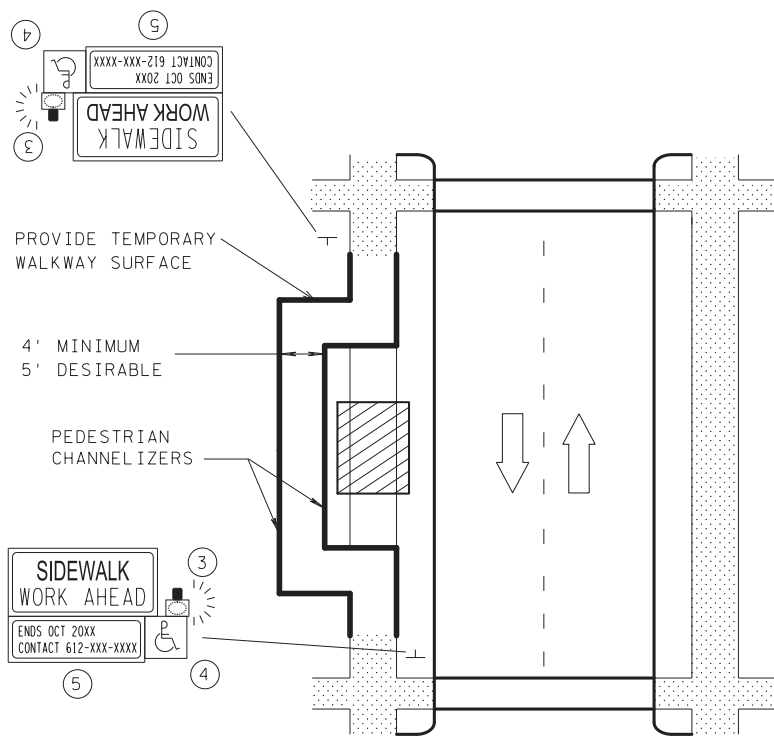
## SPECIFIC NOTES

- ① TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
- ② TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ③ AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHOULD BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
- ④ THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHOULD BE POSTED AND AN ALTERNATE ROUTE SHOULD BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
- ⑤ TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHOULD INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
- ⑥ PEDESTRIAN DETOUR TRAILBLAZING SIGNS SHOULD BE USED IF THE PEDESTRIAN DETOUR IS LOCATED SOMEPLACE OTHER THAN ACROSS THE STREET FROM THE SIDEWALK CLOSURE.

## LEGEND

	SIGN		DIRECTION OF TRAFFIC
	EXISTING PEDESTRIAN SURFACE		TRAFFIC CONTROL DEVICE
	WORK AREA		
	PEDESTRIAN CHANNELIZATION DEVICE		
	SIDEWALK BARRICADE		

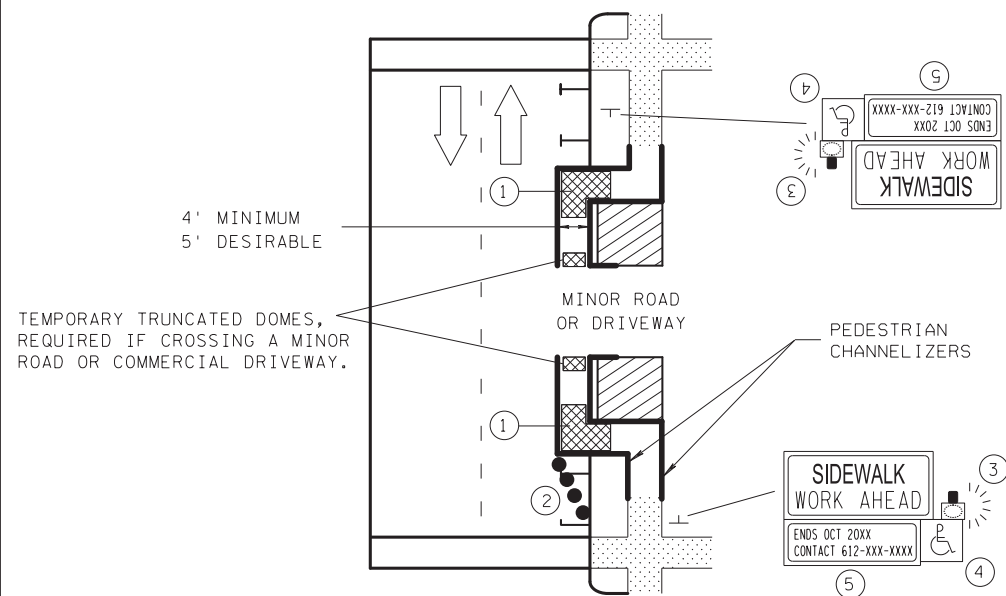
TRAFFIC CONTROL  
ALTERNATE PEDESTRIAN ROUTE (APR) DETOUR



BYPASS ON ADJACENT AVAILABLE  
RIGHT OF WAY

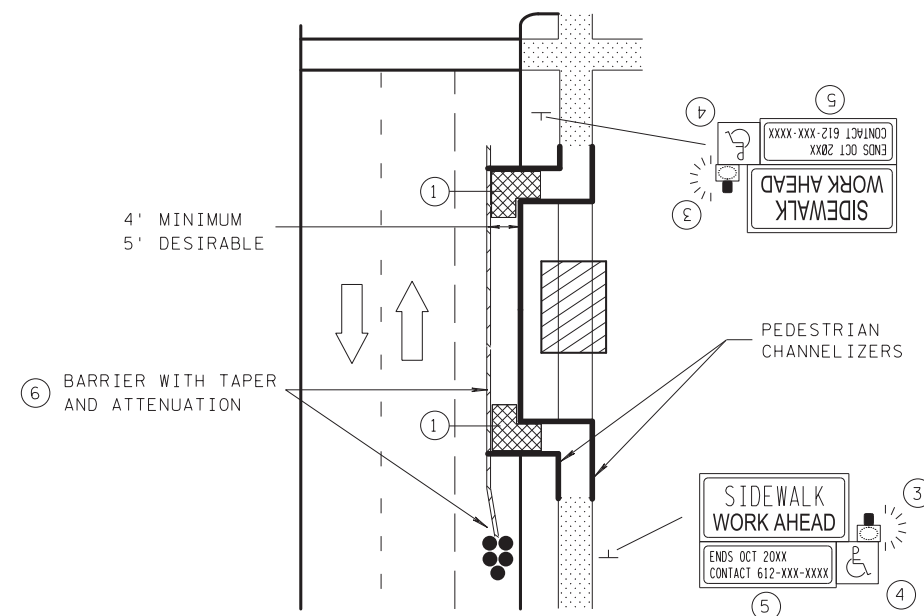
BYPASS TYPE A

NOTE: MAY ONLY BE USED ON ROADWAY WITH POSTED  
SPEED OF 45 MPH OR LESS.



SIDEWALK BYPASS USING PARKING OR  
SHOULDER ON LOW SPEED ROADWAY

BYPASS TYPE B



SIDEWALK BYPASS USING  
SHOULDER OR PARKING LANE  
HIGH SPEED ROADWAY

BYPASS TYPE C

## GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECTABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE AN ALTERNATE PEDESTRIAN ROUTE (APR) AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

PROVIDE A SMOOTH, CONTINUOUS, HARD SURFACE THROUGH THE LENGTH OF THE APR. PROVIDE A FIRM, STABLE, AND SLIP RESISTANT TEMPORARY WALKWAY SURFACE TO COVER SHORT SEGMENTS OF ROUGH, SOFT, OR UNEVEN GROUND.

THE PEDESTRIAN TRAFFIC SIGNALS CONTROLLING CLOSED CROSSWALKS SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

WHEN A SIGN OR BARRICADE IS ORIENTED SUCH THAT VISIBILITY TO TRAFFIC (BIKES, PEDESTRIANS) IS REDUCED ENOUGH TO CAUSE HAZARD, DELINEATE THE SIGN/BARRICADE WITH APPROPRIATE DEVICES.

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING AN APR IN THE FOLLOWING ORDER OF PREFERENCE:

1. PROVIDE THE APR ON THE SAME SIDE OF THE STREET AS THE DISRUPTED ROUTE UTILIZING BYPASSES.
2. WHERE IT IS NOT FEASIBLE TO PROVIDE A SAME SIDE APR, PROVIDE A DETOUR ON THE OTHER SIDE OF THE STREET.
3. WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS.

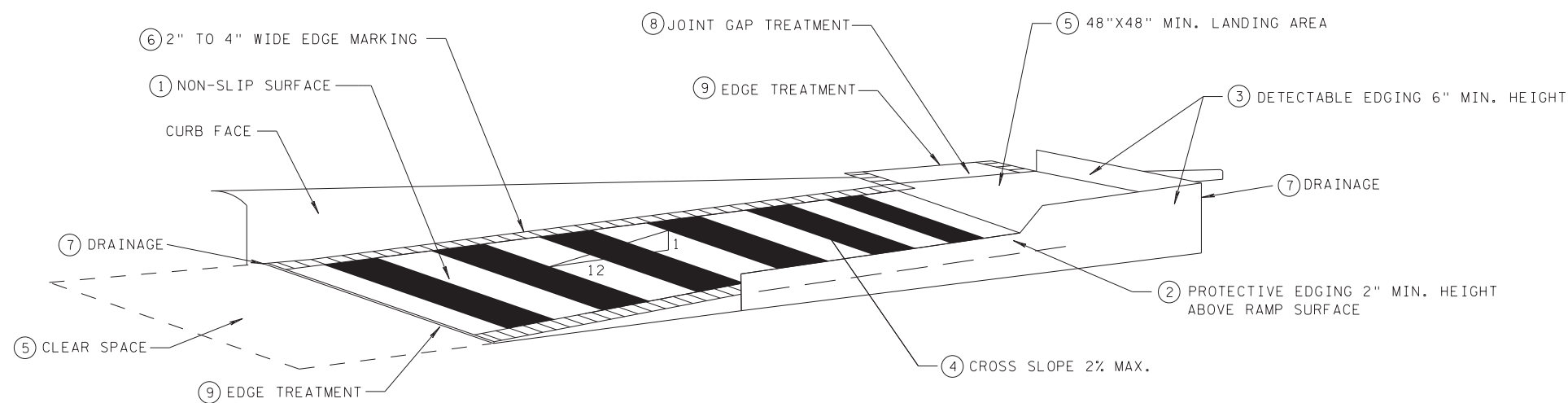
## SPECIFIC NOTES

- ① TEMPORARY CURB RAMPS WITH DETECTABLE WARNINGS.
- ② 5 DEVICE TAPER 25 FEET LONG, RECOMMENDED WHEN THE CLOSED AREA WAS USED AS AN INTERMITTENT TRAFFIC LANE OR BYPASS LANE. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ③ AN APPROVED AUDIBLE MESSAGE DEVICE OR TACTILE MESSAGE SHOULD BE PROVIDED FOR SIGHT-IMPAIRED PEDESTRIANS.
- ④ THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PRIMARY TEMPORARY PEDESTRIAN DETOUR. THE REASON FOR THE NON-COMPLIANCE SHOULD BE POSTED AND AN ALTERNATE ROUTE SHOULD BE POSTED WHEN THE PRIMARY TEMPORARY PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.
- ⑤ TYPICAL SIGN MESSAGE FOR A TEMPORARY PEDESTRIAN DETOUR SHOULD INCLUDE INFORMATION SUCH AS THE DURATION OF THE WALKWAY RESTRICTIONS (BEGINNING AND/OR END DATES) AND A PROJECT CONTACT NUMBER FOR 24 / 7 QUESTIONS OR REPORTING HAZARDS.
- ⑥ SEE MN MUTCD FOR GUIDANCE ON PLACEMENT AND USAGE OF BARRIER.

## LEGEND

	SIGN		DIRECTION OF TRAFFIC
	EXISTING PEDESTRIAN SURFACE		TRAFFIC CONTROL DEVICE
	WORK AREA		SIDEWALK BARRICADE
	PEDESTRIAN CHANNELIZATION DEVICE		
	BARRIER		

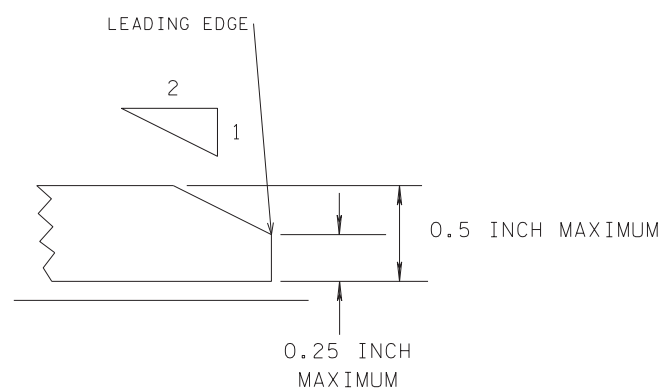
## TRAFFIC CONTROL ALTERNATE PEDESTRIAN ROUTE (APR) BYPASS



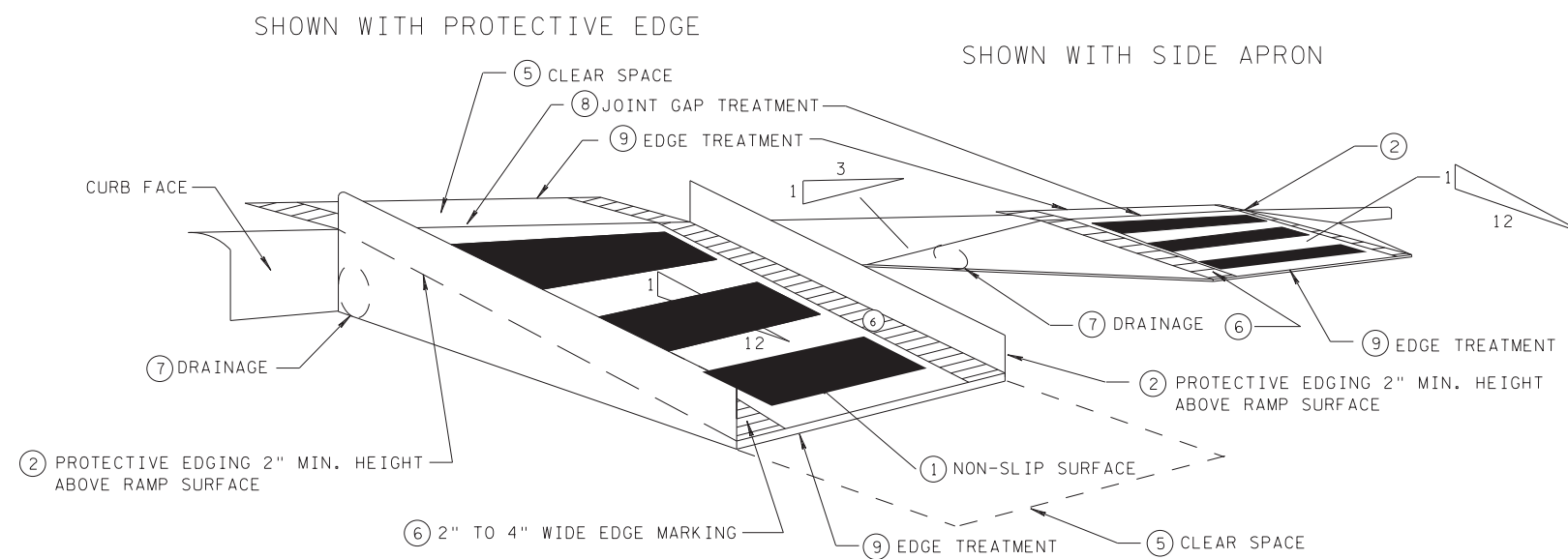
TEMPORARY CURB RAMP  
PARALLEL TO CURB

## SPECIFIC NOTES

- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.
- ② PROTECTIVE EDGING WITH A 2' MIN. HEIGHT SHALL BE PLACED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3. PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE PLACED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ CURB RAMPS AND LANDINGS SHALL HAVE A 2% MAX. CROSS SLOPE.
- ⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR, 2" TO 4" WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
- ⑦ WATER FLOW IN THE GUTTER SYSTEM SHALL NOT BE IMPEDED.
- ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHOULD BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2" HEIGHT.

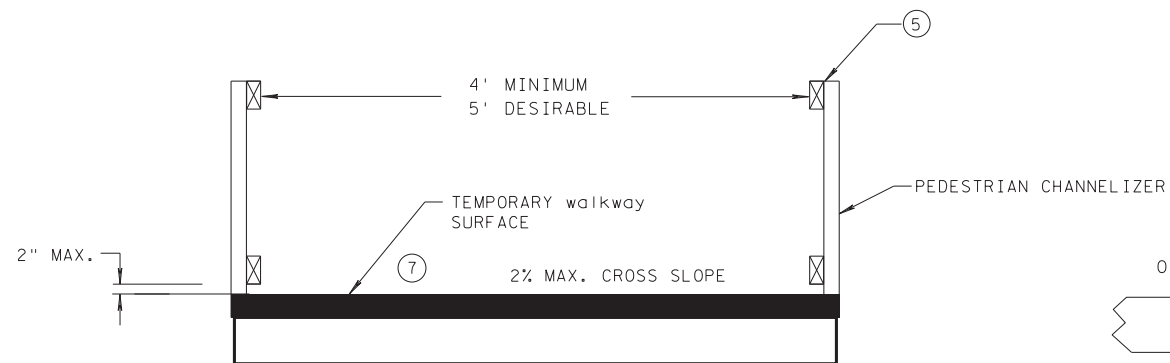


⑨ EDGE TREATMENT

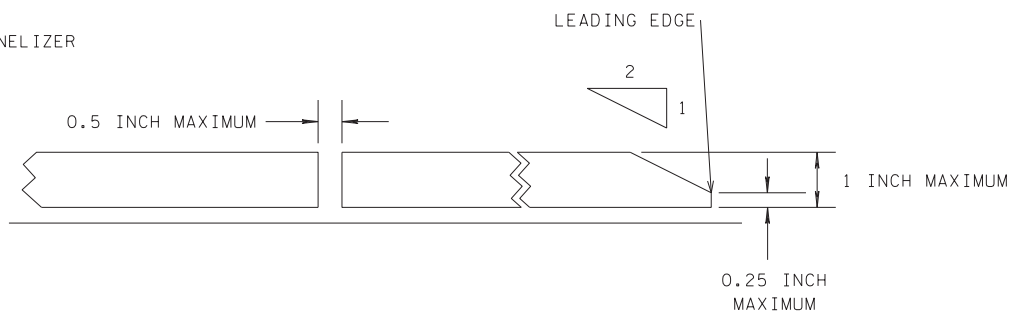


TEMPORARY CURB RAMP  
PERPENDICULAR TO CURB

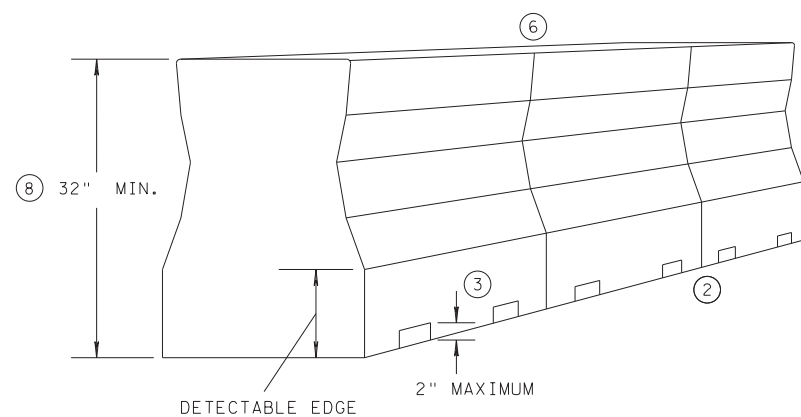




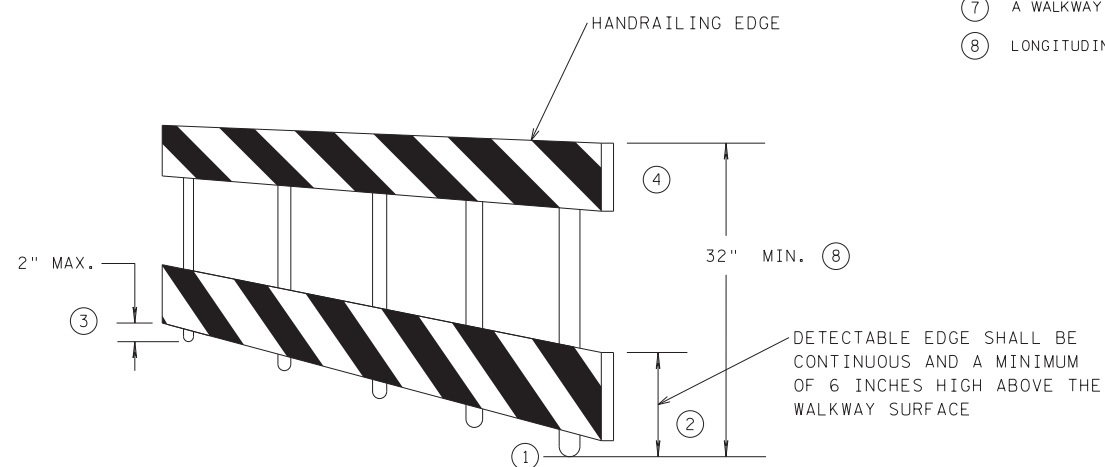
TEMPORARY PEDESTRIAN ACCESS



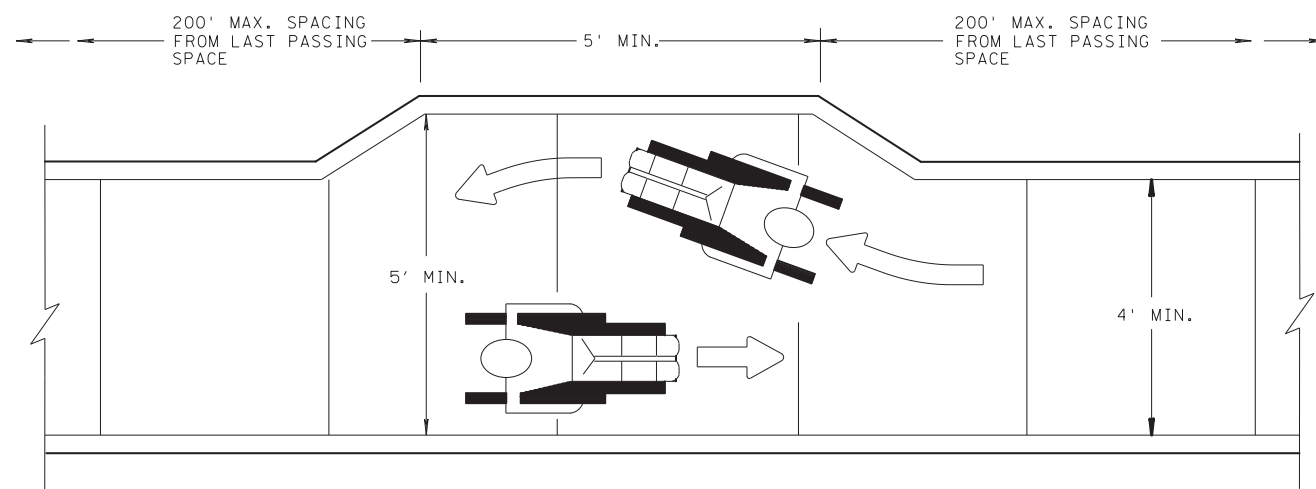
TEMPORARY WALKWAY SURFACE



PEDESTRIAN CHANNELIZER USING A BARRIER  
(MINIMUM REQUIREMENTS)



PEDESTRIAN CHANNELIZER  
(MINIMUM REQUIREMENTS)



NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL

## GENERAL NOTES

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

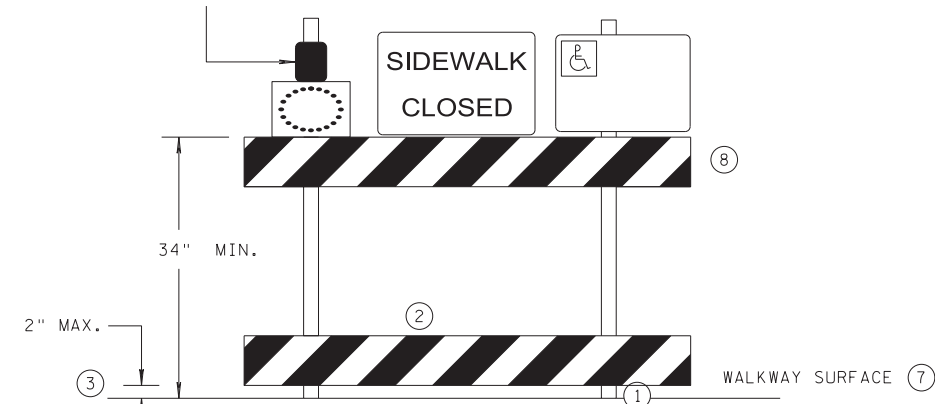
ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIERS APPLICATION.

BARRICADES SHALL BE PLACED ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE.

## SPECIFIC NOTES

- ① ANY TRIPPING HAZARD IN THE WALKWAY NEEDS A DETECTABLE EDGE. BALLAST SHALL BE LOCATED BEHIND OR INTERNAL TO THE DEVICE. ANY SUPPORT ON THE FRONT OF THE DEVICE SHALL NOT EXTEND INTO THE 48 INCH MINIMUM WALKWAY CLEAR SPACE AND SHALL NOT EXCEED 0.5 INCHES IN HEIGHT ABOVE THE WALKWAY SURFACE.
- ② DETECTABLE EDGES SHALL BE CONTINUOUS AND 6 INCHES MIN. HIGH ABOVE WALKWAY SURFACE AND HAVE COLOR MARKINGS CONTRASTING WITH THE WALKWAY SURFACE.
- ③ DEVICES SHALL NOT BLOCK WATER DRAINAGE FROM THE WALKWAY. A GAP HEIGHT OR OPENING FROM THE WALKWAY SURFACE UP TO A MAXIMUM OF 2 INCHES IS ALLOWED FOR DRAINAGE PURPOSES.
- ④ WHEN HAND GUIDANCE IS REQUIRED, THE TOP RAIL OR TOP SURFACE SHALL:
  - BE IN A VERTICAL PLANE PERPENDICULAR TO THE WALKWAY ABOVE THE DETECTABLE EDGE,
  - BE CONTINUOUS AT A HEIGHT OF 34 TO 38 INCHES ABOVE THE WALKWAY SURFACE, AND
  - BE SUPPORTED WITH MINIMAL INTERFERENCE TO THE PEDESTRIAN'S HANDS OR FINGERS.
- ⑤ ALL DEVICES SHALL BE FREE OF SHARP OR ROUGH EDGES, AND FASTENERS (BOLTS) SHALL BE ROUNDED TO PREVENT HARM TO HANDS, ARMS OR CLOTHING OF PEDESTRIANS.
- ⑥ ALL DEVICES USED TO CHANNELIZE PEDESTRIAN FLOW SHOULD INTERLOCK SUCH THAT GAPS DO NOT ALLOW PEDESTRIANS TO STRAY FROM THE CHANNELIZED PATH.
- ⑦ A WALKWAY SURFACE SHALL BE FIRM, STABLE, AND SLIP RESISTANT.
- ⑧ LONGITUDINAL CHANNELIZING DEVICES FOR PEDESTRIANS SHALL BE 32 INCHES HIGH OR GREATER.

TYPICAL AUDIBLE MESSAGE  
DEVICE LOCATION WHEN USED



SIDEWALK BARRICADE